Agenda Item
Attachment 2a

Board Meeting
August 20 - 21, 2002

STATE OF CALIFORNIA — CALIFORNIA INTEGRATED WASTE MANAGEMENT BOARD

Base Year Modification Request Certification

Part 2: Generation Study - Includes Extrapolation of Residential or Non-Residential Diversion Data

To request a substitution for a previously approved base-year used in calculating the diversion rate for your jurisdiction, please complete and sign this form and return it to your Office of Local Assistance (OLA) representative at the address below, along with any additional information requested by OLA staff. When all documentation has been received, your OLA representative will work with you to prepare for your appearance before the Board. If you have any questions about this process, please call (916) 341-6199 to be connected to your OLA representative.

Mail completed documents to:

California Integrated Waste Management Board
Office of Local Assistance
1001 I Street, 9th Floor
PO Box 4025
Sacramento, CA 95812-4025

General Instructions:

Please select the **ONE** choice below that best explains your request to the Board.

☐ 1. Use a recent generation-based study to calculate our current reporting-year generation amount, but not officially change our existing Board-approved base year.

☐ 2. Use a recent generation-based study to officially change our existing Board-approved base year to a new base year.

The shaded cells on these sheets are protected . If you have problems using these sheets, please contact your Office of Local Assistance representative.

Section 1: Jurisdiction Information and Certification
All respondents must complete this section.

I certify under penalty of perjury that the information in this document is true and correct to the best of my knowledge, and that I am authorized to make this certification on behalf of:

Jurisdiction Name: **Santa Cruz Unincorporated County**	County: **Santa Cruz**	
Authorized Signature: [signature]	Title: Director of Public Works	
Type/Print Name of Person Signing: Thomas L. Bolich	Date: 12-18-01 / 18-Dec-01	Phone ( ): (831) 454-3102
Person Completing This Form (please print or type): Dan deGrassi	Title: IWM Planner	
Affiliation: Santa Cruz County Department of Public Works		
Mailing Address: 701 Ocean Street, Room 410	City: Santa Cruz	State: CA / ZIP Code: 95060
E-mail address: dpw180@co.santa-cruz.ca.us		

Post-it® Fax Note 7671 | Date 4-16-02 | # of pages ▶ 1
To Terri Edwards | From Dan deGrassi
Co./Dept. CIWMB-OLA | Co.
Phone # | Phone # 831-454-3102
Fax # 916-319-7480 | Fax #

Section II: Information for New Generation-Based Study

Attach additional sheets if necessary— reference each response to the appropriate cell number (e.g., 4).

Note: New base years must be representative of a jurisdiction's disposal and diversion.

1. Current Board-approved existing base-year:	2. Proposed new generation-based study year:
19% (1990)	**46% (1998)**

3. Explain how the proposed generation study year is representative of average annual jurisdiction disposal and diversion:

1998 was a typical year in terms of disposal and diversion quantities; there were no out-of-the-ordinary waste generation events or other unusual circumstances affecting disposal or diversion amounts.

4. Enter your diversion rates below.

Diversion rate calculated using existing base year	**a. 19 %**	**Diversion rate calculated using new generation-based study**	**b. 46 %**
For existing base year pounds/person/day based on generation	**6**	**For new generation based study pounds/person/day based on generation**	**8**
Residential generation 38 % Non-Residential generation 62 %		**Residential generation 38 % Non-Residential generation 62 %**	
Population existing generation-based study	**130086**	**Population new generation-based study**	**136800**

5. If there is an increase between 4a and 4b, please explain how the new diversion rate is consistent with your current diversion implementation efforts. If the proposed new generation tonnage results in an increase in your pounds/person/day, please explain how this is consistent with your current diversion implementation efforts and provide examples, e.g. change in jurisdiction's demographics.

The waste generation numbers cited in the original Waste Generation Study were inaccurate: they significantly undercounted existing diversion. In addition, the new diversion rate more accurately reflects the fact that the County has implemented a full spectrum of diversion programs. Please refer to the PARIS listing for program detail. The increase in pounds per person per day results from 1) the undercount in the original WGS; 2) an 11% population increase; and 3) an increase in economic activity. Compared to 1990, there are more people in the county with higher disposable incomes generating more waste. The County's diversion programs, which began in earnest in 1997 with our new refuse collection franchise, are thus recovering a higher percentage of a larger wastestream.

6. If the difference between the proposed diversion rates in 4a and 4b is greater than 5 percentage points, please explain the specific reasons for the difference. (For example: new/improved curbside diversion programs.)

The difference can be attributed to the following factors: 1) the original waste generation study significantly undercounted existing diversion; 2) the County has implemented countywide residential curbside recycling and yard waste collection service; 3) the County has implemented commercial recycling service; 4) the County has expanded drop-off recycling service in terms of locations, hours of operation and materials accepted; 5) the County has substantially increased its public outreach for promoting source reduction, recycling and composting by the residential and non-residential sectors.

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Population existing generation-based study	**130086**	**Population new generation-based study**	**136800**

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7. Disposal Tonnage: (enter values)	42789	69814	112603
	Residential	Non-Residential	Total

Please select the **ONE** choice below that best explains your **disposal** data and complete the required tables.

☑ a. All tons claimed are from the Board's Disposal Reporting System (No explanation required. Go to Section 8.)

☐ b. All tons claimed are from a 100 percent audit of hauler and self-haul tonnage. (Please complete Reporting Year Tonnage Modification Request and Certification sheet found at http://www.ciwmb.ca.gov/lgcentral/forms/rytnmdrq.doc)

☐ c. Some Disposal Reporting System data were corrected. (Please complete Reporting Year Tonnage Modification Request and Certification sheet found at http://www.ciwmb.ca.gov/lgcentral/forms/rytnmdrq.doc)

8. In the table below, list the summarized diversion activities, and diversion data records that support your claim and are available for Board audit. (Note: the Board expects the jurisdictions to be able to provide all back-up documentation, if requested.) Include type of record and location—for example, weight tickets from transfer stations. This section should capture all diversion tonnage (form will perform all addition calculations). If any diversion is from restricted wastes [i.e., agricultural wastes, inert solids (e.g. concrete, asphalt, dirt, etc.), white goods, and scrap metal], please identify those programs/waste types and fill out section 11. Note: Restricted waste material should not be extrapolated in non-residential waste audits. Please mark as attachment 8 all copies of survey forms.

* Please provide detailed non-residential waste audit information in Section 9.

Note: The Board has indicated that it will be scrutinizing total source reduction amounts greater than 5% of total generation. Please be prepared to provide additional details subsantiating your claim.

Diversion Activity Please use the Board's program types. The program type glossary is online at http://www.ciwmb.ca.gov/LGCentral/PARIS/Codes/Reduce.htm	Actual tons (A)	Estimated or extrapolated tons (B)	Total tons (A+B)	Relative Percent to Total Generation (A+B)/Total Generation	Specific material type(s) (List programs with multiple materials together)	Specific conversion factor used (if any) and Source	Type of record and location of record
Residential Activities:							
Source Reduction							
Backyard composting	39	6834	6873	3.3%	organics	.054tons/cy-DSG	Survey Report-DPW
Grasscycling	17	3206	3223	1.5%	organics	.175tons/1000sf-DSG	Survey Report-DPW
Other residential source reduction (list each program separately)							
Garage Sales	24	3496	3520	1.7%	reusables	.35tons/sale-DSG	Survey Report-DPW
Bag Reuse	1	139	140	0.1%	paper bags	8bags/lb (actual weight) 150 bags/HH/yr-study estimate	Survey Report-DPW
Junk Mail Reduction	1	116	117	0.1%	mixed paper	12lbs/HH/yr-study estimate; NY Times article, 11-1-94	Survey Report-DPW
Diapers	5	846	851	0.4%	mixed paper	.44lbs/diaper-study actual weight	Survey Report-DPW
Subtotal: Res. Source Reduction	**87**	**14637**	**14724**	**7.0%**			
Recycling							
Curbside Recycling	13527	N/A	13527	6.4%	paper, metal, plastic, glass	weight tickets	Monthly Reports-DPW
Buyback centers	1002	N/A	1002	0.5%	paper, metal, plastic, glass	sales records	Monthly Reports-DPW; DOC-DOR
Drop-off centers	5737	N/A	5737	2.7%	paper, metal, plastic, glass	weight tickets	Monthly Reports-DPW
Other residential recycling (list each program separately)							
		N/A					
		N/A					
		N/A					

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		N/A					
		N/A					
Subtotal Residential Recycling	**20266**		**20266**	**9.6%**			
Composting							
Green waste drop-off	12409	N/A	12409	5.9%	landscape waste	weight tickets	Monthly Reports-DPW
Curbside green waste	6681	N/A	6681	3.2%	landscape waste	weight tickets	Monthly Reports-DPW
Christmas Tree program	Included above	N/A	Included above				
Other residential composting (list each program separately)							
Enter program name		N/A					
Enter program name		N/A					
Enter program name		N/A					
Enter program name		N/A					
Enter program name		N/A					
Subtotal Residential Composting	**19090**		**19090**	**9.1%**			
Subtotal Residential Diversion	**39443**	**14637**	**54080**	**25.7%**			
Non-Residential Activities:							
Source Reduction							
Non-residential Waste Audits*	8209		8209.34	3.9%	See Section 9	See Section 9	See Section 9
Other non-residential source reduction (list each program separately)							
		N/A					
		N/A					
		N/A					
		N/A					
		N/A					
Subtotal Non-Residential Source Reduction	**8209**	**0**	**8209.34**	**3.9%**			
Recycling							
Non-residential Waste Audits*	18686		18686	8.9%	See Section 9	See Section 9	See Section 9
Other non-residential recycling (list each program separately)							
California Grey Bears	1787	N/A	1787	0.8%	paper, metal, plastic, glass	actual wt.- mtl sales records	Survey Report-DPW
Craig's Trucking & Recycling	302	N/A	302	0.1%	paper, metal, plastic, glass, organics	actual wt.- mtl sales records	Survey Report-DPW
SCRAP	676	N/A	676	0.3%	paper, metal, plastic, glass	actual wt.- mtl sales records	Survey Report-DPW
Salinas Tallow	585	N/A	585	0.3%	organics	actual wt.- billing records	Survey Report-DPW

Diversion Activity Please use the Board's program types. The program type glossary is online at: http://www.ciwmb.ca.gov/LGCentral/PARIS/Codes/Reduce.htm	Actual tons (A)	Estimated or extrapolated tons (B)	Total tons (A+B)	Relative Percent to Total Generation (A+B)/Total Generation	Specific material type(s) (List programs with multiple materials together)	Specific conversion factor used (if any) and Source	Type of record and location of record
		N/A					
Subtotal: Non-Residential Recycling	22036	0	22036	10.5%			
Composting							
Non-residential Waste Audits*	0				See Section 9	See Section 9	See Section 9
Other non-residential composting (list each program separately)							
Horse Manure Composting	1710	N/A	1710	0.8%	manure	45lbs/day/horse: Ohio State University Extension Bulletin AGF-208-95. Best Management Practices: "Land Application of Animal Manure" ; County of Santa Cruz San Lorenzo Valley Nitrate Management Plan	Survey Report-DPW
Enter program name		N/A					
Enter program name		N/A					
Enter program name		N/A					
Enter program name		N/A					
Subtotal: Non-Residential Composting	1710	0	0				
Subtotal: Non-Residential Diversion	31955	0	30245.34	14.4%			
Residential/Non-residential Diversion Activities							
ADC		N/A					
Sludge		N/A					
Scrap metal		N/A					
Construction and demolition	5194	N/A	5194	2.5%	concrete	weight tickets	Landfill Records-DPW
Landfill salvage	6508	N/A	6508	3.1%	concrete, asphalt, plastic, mattresses	weight tickets	Landfill Records-DPW
Subtotal Residential/Non-Residential Diversion	11702		13412	6.4%			
Total Res/Non-Res Source Reduction Tons	8296	14637	22933	10.9%			
Total Diversion Tons	83100	14637	97737.34	46%			
Total Disposal Tons from Sec.7	112603		112603	53.5%			
Total Generation (Div+Dis)	195703	14637	210340.34				
Diversion Rate				46%			

9. Specific Non-Residential Sector Waste Audits – Top 10 Non-Residential Generators

Please complete this table for the top 10 non-residential generators that were surveyed. List each non-residential generator separately from the largest to smallest, based on total diversion tons. Audit reference number ties to your audit sheets.
(Form will perform all calculations).

Include attachment, marked attachment 9, which includes a summary of all the generators surveyed and all extrapolation calculations used to estimate the diversion rate:

- Include copies of survey form(s) used.
- Include for each generator (use type of generator in lieu of specific generator name, e.g. grocery store) each specific diversion activity and material type (e.g. cardboard recycling) and the associated tonnage for each diversion activity/material type, and applicable conversion factors/source.
- If using number of employees for your extrapolation method, include this information for each generator surveyed.
- Please order the non-residential generators, largest to smallest, based on total diversion tons.
- Also, summary should include the generators that were selected to be surveyed, but did not respond to the survey and the number of employees at each generator.
- As a comparison between disposal from the waste audits and DRS, the disposal for each generator must be included in the summary. Also, you should note if the disposal is being used for the extrapolation calculation. For each non-residential generator, the disposal must be broken out by cubic yard, and roll-off or compactor weights. If disposal was estimated for either disposal-based or employment-base extrapolation methods, please include conversion factor(s) for disposal and source for conversion factor(s). Please provide an explanation as to how the conversion factor(s) is (are) appropriate for your jurisdiction, e.g. study was conducted to determine average weights using hauler weight tickets, etc.

Type of Non-residential Generator	Audit Reference Number	Specific Diversion Activities include material type (e.g. paper recycling, grasscycling). (List activities on one line)	Number of Employees	Source Reduction Tons	Recycling Tons	Composting Tons	Total Diversion Tons	Percent of Total Generation (Total Diversion Tons/Total Generation in Section 8)	Survey Method Phone (P) Mail (M) On-site (O) Other ___
Tree Trimming Service	5	mulching-wood waste	not asked*		6785		6785	3.2%	P
Tree Trimming Service	6	mulching-wood waste	not asked		3945		3945	1.9%	P
Landscape Business	1	mulching-wood waste	not asked		3135		3135	1.5%	P
School District	11	grasscycling	not asked	2683			2683	1.3%	P
Paper Manufacturer	28	paper recycling	not asked		1333		1333	0.6%	P
Thrift Store	35	misc. household items	not asked		939		939	0.4%	P
Golf Course	22	grasscycling	not asked	880			880	0.4%	P
Golf Course	21	grasscycling & mulching (ww)	not asked	113	720		833	0.4%	P
Golf Course	18	grasscycling & mulching (ww)	not asked	113	720		833	0.4%	P
Tree Trimming Service	3	mulching-wood waste	not asked		589		589	0.3%	P
Totals				3789	18166		21955		

Summarize the non-residential diversion activities for the top 10 generators quantification methodology and applicable conversion factors and sources. (e.g. cardboard recycling: quantified by monthly tonnage receipts provided by the contact person at the business)

Wood waste mulching: Estimates of cubic yards processed by Businesses 5, 6, 1, 21, 18, & 3 times 450lbs/cy, per CIWMB Diversion Study Guide times Unincorporated County %. Tree trimmers, landscapers & some golf courses regularly chip prunings and small limbs and leave on site for mulch use. Companies were contacted and surveyed regarding the amount of chipped prunings that they typically leave at sites in the course of a year and % of business in the Unincorporated County. Grasscycling: Estimates of lawn area for Businesses 11, 22, 21, & 18 times 8 tons/acre, per CIWMB Diversion Study Guide. Companies were contacted and surveyed regarding the amount of grass clippings left on site. Details for mulching and grasscycling are in Appendices 4E, 4F, 4G of BVA Diversion Study. Paper Recycling: Business 28 recycles and manufacturers paper; actual weight reported by the business. Household items: Business 35 sells donated items. Tons for this business were calculated using lbs/yr reported to Diversion Study by item sold and actual weights of these items. Details are in Appendix 4D of BVA Diversion Study.
* Data collected through a 1999 diversion study, not a waste audit; data on # of employees not collected.

10. On a separate sheet of paper, marked attachment 10, provide the following information for each diversion program listed in section 8 that was extrapolated from representative sampling. (Note: Do not include non-respondents in extrapolation because there is no data from the non-respondents. Extrapolate from survey respondents.)

A. Describe sampling method including:

- Type of sampling method (for either stratified or cluster sampling provide detailed information on how strata and clusters were collected.);
- Total number of samples included in the survey;
- Number of non-respondents and respondents;
- Total population;
- Source for identifying population (e.g. city business licenses, commercial database, resident's addresses, etc.);
- Relation of sample size to total population;
- Survey data collection tool(s) and approaches;
- Confidence level and margin of error for the sampled population;
- Outliers (specific generators which fall significantly above or below others) should be removed from base amount prior to extrapolation; and
- Unusual outliers and exceptional anomalies should be described in detail.

B. Describe the methods used to prevent double-counting between the surveys and the reported tonnages from haulers, recyclers, MRFs and composters.

C. Describe extrapolation method including:

- Basis of extrapolation;
- Why this extrapolation method is appropriate; and
- Sources of information used for extrapolation, such as disposal or employment.
- Include all Calculations.

11. For each restricted waste type [(i.e. agricultural waste, inert solids (e.g. concrete, asphalt, dirt, etc.), scrap metals and white goods (PRC Section 41781.2)] and associated program, please provide the following information:

a. If the diversion program started on or after January 1, 1990, complete the following table:
(Note: program name refers to one specific diversion program for that waste type, for example diversion conducted by City Public Waste Dept.)

Restricted Waste Type	Specific Program name	Year started	Tonnage
Pull Down for Waste Types			
Pull Down for Waste Types			
Pull Down for Waste Types			
Pull Down for Waste Types			
Pull Down for Waste Types			
Pull Down for Waste Types			

b. If the diversion program started before January 1, 1990, on a separate sheet, marked attachment 11b, provide the following documentation: (Note: If documentation for a waste type and program has already been approved by the Board, you do not have to provide an attachment 11b for that waste type and program. Instead please provide date of Board approval of previous submitted information.) **19-Nov-97** (Date)
If documentation is not available, go to 11d.

- How the diversion was the result of a local action taken by the jurisdiction, which specifically resulted in the diversion [PRC Sec. 41781.2 (c) (1)].

- That the amount of that waste type diverted from the jurisdiction in 1990 was less than or equal to the amount of that waste type disposed at a permitted disposal facility by the jurisdiction in any year before 1990. (Note: this criterion is applicable to the entire jurisdiction, not to individual programs [PRC Sec. 41781.2 (c) (2)]). Please include documentation.
- The jurisdiction is implementing, and will continue to implement, the diversion programs in its Source Reduction and Recycling Element.

c. If the diversion program started before January 1, 1990, and the documentation requested in 11b is available (but not yet approved by the Board), complete the table below for each program claimed:

Restricted Waste Type	Specific Program Name	New base year or reporting year diversion tonnage
Inert Solids	**Buena Vista Landfill Salvage - Roadbase**	**4411**
Scrap Metal	**Buena Vista Landfill Drop-off Recycling**	**2336**
Scrap Metal	**Ben Lomond Transfer Station Drop-off Recycling**	**1243**
Pull Down for Waste Types		
Pull Down for Waste Types		
Pull Down for Waste Types		

d. If the diversion program started before January 1, 1990, and the documentation requested in 11b is not available, please complete the table below for each program claimed. (***Note**: Only the difference between the new base year/reporting year and 1990 can be counted in the diversion rate calculation.)*

Restricted Waste Type	Specific Program name	New base year or reporting year tonnage	1990 diversion tonnage	Difference
Pull Down for Waste Types				
Pull Down for Waste Types				
Pull Down for Waste Types				
Pull Down for Waste Types				
Pull Down for Waste Types				
Pull Down for Waste Types				

Attachment 9

Business Audit Diversion for the Unincorporated Areas of Santa Cruz Cnty

Ref. #	Category	Type of Business	Diversion Category	Material Type	Diversion Activity	Conversion Factor and Source	SR Tons	Recycle Tons
1	Generator	Tree Trimming Service	Recycling	wood waste	recycling	1746.2 cu. yds./mo. processed by business at 450 lbs./cu. yd. & 70% of business within uni. County		3135.25
2	Generator	Tree Trimming Service	Recycling	wood waste	recycling	8.3 cu. yds./mo processed by business at 450 lbs./cu. yd. & 90% of business within uni. County		20.25
3	Generator	Tree Trimming Service	Recycling	wood waste	recycling	545 cu. yds./mo. processed by business at 450 lbs./cu. yd. & 40% of business within uni. County		588.6
4	Generator	Tree Trimming Service	Recycling	wood waste	recycling	50 cu. yds./mo. processed by business at 450 lbs./cu. yd. & 85% of business within uni. County		114.75
5	Generator	Tree Trimming Service	Recycling	wood waste	recycling	5026 cu. yds./mo. processed by business at 450 lbs./cu. yd. & 50% of business within uni. County		6785
6	Generator	Tree Trimming Service	Recycling	wood waste	recycling	1885.3 cu. yds./mo. processed by business at 450 lbs./cu. yd. & 77.5% of business within uni. County		3,945
7	Generator	Tree Trimming Service	Recycling	wood waste	recycling	33.3 cu. yds./mo processed by business at 450 lbs./cu. yd. & 100% of business within uni. County		90
8	Generator	School	SR	grass	grasscycling	.75 acre @ 7.6 tons/acre	5.7	
			Recycling	green waste	prunings/clippings	actual weight		5.3
9	Generator	School	SR	grass	grasscycling	3 acres @ 7.6 tons/acre	22.8	
10	Generator	School	SR	grass	grasscycling	8 acres @ 7.6 tons/acre	60	
11	Generator	School district	SR	grass	grasscycling	335 acres @ 7.6 tons/acre	2546	
12	Generator	School district	SR	grass	grasscycling	14 acres @ 7.6 tons/acre	106.4	
			Recycling	green waste	prunings/clippings	actual weight		10.5
13	Generator	School district	SR	grass	grasscycling	.3 acres @ 7.6 tons/acre	2	
14	Generator	School district	SR	grass	grasscycling	10 acres @ 7.6 tons/acre	76	

Attachment 9

Ref. #	Category	Type of Business	Diversion Category	Material Type	Diversion Activity	Conversion Factor and Source	SR Tons	Recycle Tons
15	Generator	Junior College	SR	grass	grasscycling	20 acres @ 7.6 tons/acre	152	
			Recycling	green waste	prunings/clippings	cu. yds. @ 260 lbs/cu. Yd.		9
16	Generator	School district	SR	grass	grasscycling	12 acres @ 7.6 tons/ acre	91.2	
			Recycling	green waste	prunings/clippings	111 cu yds @ 200 lbs/cu yd		11
17	Generator	County parks	SR	grass	grasscycling	47.6 acres @ 7.6 tons/acre	361.76	
			Recycling	green waste	prunings/clippings	cu. yds. @ 260 lbs/cu yd.		50
18	Generator	Golf Course	SR	grass	grasscycling	90 acres @ 7.6 tons/acre	684	
			Recycling	wood waste	chipped and used on-site	500 cu yds @ 450 lbs/cu yd		112.5
19	Generator	Golf Course	SR	grass	grasscycling	18 acres @ 7.6 acres/ton	136.8	
			Recycling	wood waste	chipped and used on-site	111 cu yds @ 450 lbs/cu yd		25
20	Generator	Golf Course	SR	grass	grasscycling	55 acres @ 7.6 tons/acre	418	
			Recycling	wood waste	chipped and used on-site	463 cu yds @ 45 lbs/cu yd		104
21	Generator	Golf Course	SR	grass	grasscycling	90 acres @ 7.6 tons/acre	684	
			Recycling	wood waste	chipped and used on-site	500 cu yds @ 450 lbs/cu yd		112.5
22	Generator	Golf Course	SR	grass	grasscycling	110 acres @ 7.6 tons/acre	836	
23	Utilizes Recycled Materials	Dairy/Ranch	Recycling	food waste	used as cattle feed	Average of 6 to 3 loads/wk at 1.5 to 3 tons/truckload received from uninc. County businesses		437.6
24	Utilizes Recycled Materials	Farm/Feed Service	Recycling	food waste	used as pig feed	Average of 7 to 5 loads/wk at 1.5 to 2 tons/truckload received from uninc. County businesses		497
25	Utilizes Recycled Materials	Farm	Recycling	food waste	used as animal feed; some food donation to homeless shelter	Average of 5.5 to 1.6 loads/wk at 2 to 7 tons/truckload received from uninc. County businesses		524
26	Utilizes Recycled Materials	Feed Manufacturer	Recycling	food waste	produces feed from food waste	Average of 3 to 2 loads/wk at 3 to 4 tons/truckload received from uninc. County businesses		401

Attachment 9

Ref. #	Category	Type of Business	Diversion Category	Material Type	Diversion Activity	Conversion Factor and Source	SR Tons	Recycle Tons
27	Utilizes Recycled Materials	Paper Mfgr.	Recycling	paper	recycled paper/manufacture paper	weight tickets		1633
28	Utilizes Recycled Materials	Thrift Store	SR	misc. household items	sells donated items	5333 clothing items, 13 plastic items, 800 books. Weight conversions based on averages for cited materials as found in "Density Conversion Factors", by Dr. Eugene Tseng, in Los Angeles County Training Manual for Business Recycling Technical Assitance Program, December 1999.	4.4	
29	Utilizes Recycled Materials	Thrift Store	SR	misc. household items	sells donated items	lbs/year reported by approximate # items sold: 19 electronic equipment items, 1333 clothing items, 23 furniture items, 1481 paper items, 158 plastic items, 800 books. Same weight conversion source as above.	4.6	
30	Utilizes Recycled Materials	Thrift Store	SR	misc. household items	sells donated items	lbs/year reported by approximate # items sold: 27 non-ferrous metal items, 4 electronic equipment items, 4 mattresses, 1333 clothing items, 23 furniture items, 2222 paper items, 158 plastic items, 40 construction items.Same weight conversion source as above.	6.7	
31	Utilizes Recycled Materials	Thrift Store	SR	misc. household items	sells donated items	lbs/year reported by approximate # items sold: 2667 clothing items. Same weight conversion source as above.	1.9	
32	Utilizes Recycled Materials	Thrift Store	SR	misc. household items	sells donated items	lbs/year reported by approximate # items sold: 10,000 clothing items, 11,158 plastic items. Same weight conversion source as above.	28.7	
33	Utilizes Recycled Materials	Thrift Store	SR	misc. household items	sells donated items	lbs/year reported by approximate # items sold: 3333 clothing items, 2 furniture items, 3 metal items. Same weight conversion source as above.	2.5	
34	Utilizes Recycled Materials	Thrift Store (multiple locations)	SR	misc. household items	sells donated items	lbs/year reported by approximate # items sold: 355 electronic equipment items, 1689 mattresses, 652,082 clothing items, 6329 furniture items, 1285 paper items, 6602 plastic items, 2110 books, 971 metal items.Same weight conversion source as above.	465.1	

Attachment 9

Ref. #	Category	Type of Business	Diversion Category	Material Type	Diversion Activity	Conversion Factor and Source	SR Tons	Recycle Tons
35	Utilizes Recycled Materials	Thrift Store (multiple locations)	SR	misc. household items	sells donated items	646 electronic equipment items, 3301 mattresses, 1,272,327 clothing items, 12,347 furniture items, 2547 paper items, 12,669 plastic items, 3439 books, 1859 metal items.Same weight conversion source as above.	906.6	
36	Utilizes Recycled Materials	Thrift Store	SR	misc. household items	sells donated items	lbs/year reported by approximate # items sold: 1127 clothing items. Same weight conversion source as above.	0.8	
37	Utilizes Recycled Materials	Thrift Store	SR	misc. household items	sells donated items	lbs/year reported by approximate # items sold: 800 clothing items, 70 furniture items. Same weight conversion source as above.	3.6	
38	Utilizes Recycled Materials	Thrift Store	SR	misc. household items	sells donated items	lbs/year reported by approximate # items sold: 2200 clothing items. Same weight conversion source as above.	1.7	
39	Generator	Wholesale Food Distributor	SR	pallets	pallet reuse	25,000 pallets (single use) at 40 lb./pallet	500	
40	Generator	Farm	SR	pallets	pallet reuse	10 pallets (single use) at 40 lb./pallet	0.2	
41	Generator	Farm	SR	shipping containers	container reuse	4000 at 13 lb./container (actual weight) single reuse	26	
			SR	pallets	pallet reuse	2400 pallets (single use) at 40 lb./pallet	48	
			SR	food waste	use as soil amendment	monthly tonnage approximation using truck weights	24	
42	Generator	Nursery	SR	grass	grasscycling	1/4 acre at 6.5 tons/acre	1.6	
			Recycling	green waste	use as soil amendment	volume per month		75
						Total Business Diversion	**8209.34**	**18,686.25**

26,896

SECTION 4
DIVERTED WASTES

INTRODUCTION

A primary purpose of this project is to enable Santa Cruz County to apply to the CIWMB to use 1998 as a new base year for AB 939 compliance purposes. In order to do this, the County must have reliable measurements of the amounts of waste disposed and diverted (recycled, or otherwise prevented) in that year. Records of disposal reported to the CIWMB establish the amount of waste disposed by each California jurisdiction. However, records of diversion are not generally available; they must be developed locally through surveys of businesses and residents, asking how much material was recycled or simply was not used or disposed. This section describes the study team's work and findings from several surveys:

- Survey of residents
- Survey of diversion businesses
- General survey of businesses
- Ancillary surveys and records

SURVEY OF RESIDENTS

The 1998 population of the unincorporated portion of Santa Cruz County was listed by the State Department of Finance as 136,200 persons. This represents approximately 54,500 households, primarily in single-family dwellings but with some apartments as well. Using the same principles as those employed for public opinion polls, the study team determined that a random survey of 300 households would provide sufficient information to prepare a useful estimate of recycling and waste reduction activities by residents throughout the unincorporated County. Surveying 300 households provides 90% confidence that the average response will be within 5 percentage points of the actual Countywide average. (In fact, a 271-household survey would meet this criterion.)

Approach

The survey was designed to measure several aspects of residents' recycling and source reduction activities. Residents were surveyed to identify waste prevention activities that they participated in on an ongoing basis. The survey asked residents if, and to what extent, they:

- donated materials to churches or other non-profit organizations
- sold materials through garage sales,
- took a reusable bag to the store when they shopped
- left the clippings on their lawn when they mowed
- composted at home
- intentionally included slow growing plants in their landscaping instead of lawn
- requested to be removed from bulk mail mailing lists

ATTACHMENT 11B

COUNTY OF SANTA CRUZ
BASE YEAR MODIFICATION REQUEST CERTIFICATION
Section 11B - Restricted Waste Documentation

1. Program: Landfill Roadbase Diversion
Waste Type: Inert Materials: Concrete, Asphalt, Rock, Brick

A. Local Action: Action is taken as part of standard operating policy for the Buena Vista Landfill; this policy is embodied in the Report of Disposal Site Information and Permit Condition for operation of the landfill.

On June 20-21, 1985, the California Integrated Waste Management Board adopted Solid Waste Facility Determination of Conformance #85-8, Solid Waste Facility Permit Decision #85-58 concurring with a revision to Solid Waste Facility Permit No. 44-AA-004. That permit contains conditions and findings including a Report of Disposal Site Information, dated February 4, 1985. This RDSI states " Haul roads leading from the access road to the active waste disposal areas will be graded on intermediate surfaces and will be constructed with a base of clean demolition material or rock to ensure road use during wet weather".

B. Diversion Quantity in 1990 = 1600 tons (Source: Landfill Weight Records - Monthly Materials Summary)
Pre-1990 Disposal Quantity = 27,996 tons (Source: Santa Cruz County Waste Stream Composition Study, dated April 1990, Table 2, page 19.)

C. SRRE Program Implementation: Diversion programs in SRRE have been implemented per CIWMB PARIS records for 2000 (http://www.ciwmb.ca.gov/LGCentral/Paris/).

2. Program: Buena Vista Landfill Dropoff Recycling
Waste Type: Scrap Metal

A. Local Action: Action is taken as result of contract between County and operator of landfill recycling center, dated October 19, 1982. Section 10 of contract specifies materials to be recycled including metals. This includes all types of ferrous and non-ferrous metals such as wire, appliances, sheet metal, tin cans, pipe, fencing, etc. In 1998 Contractor sold all metal together as scrap metal and did not keep separate records for different metal types.

B. Diversion Quantity in 1990 = 1739 tons
(Source: Santa Cruz County Waste Generation Study, March 1991, Table 3-T, page 3-31)
Pre-1990 Disposal Quantity = 5523 tons
(Source: Santa Cruz County Waste Composition Study, April 1990, Table 2, page 19.)

C. SRRE Program Implementation: Diversion programs in SRRE have been implemented per CIWMB PARIS records for 2000 (http://www.ciwmb.ca.gov/LGCentral/Paris/).

3. Program: Ben Lomond Transfer Station Dropoff Recycling
Waste Type: Scrap Metal

A. Local Action: Action is taken as result of contract between County and operator of landfill recycling center, dated October 19, 1982. Section 10 of contract specifies materials to be recycled including metals. This includes all types of ferrous and non-ferrous metals such as wire, appliances, sheet metal, tin cans, pipe, fencing, etc. In 1998 Contractor sold all metal together as scrap metal and did not keep separate records for different metal types.

B. Diversion Quantity in 1990 = 1739 tons
(Source: Santa Cruz County Waste Generation Study, March 1991, Table 3-T, page 3-31)
Pre-1990 Disposal Quantity = 5523 tons
(Source: Santa Cruz County Waste Composition Study, April 1990, Table 2, page 19.)

C. SRRE Program Implementation: Diversion programs in SRRE have been implemented per CIWMB PARIS records for 2000 (http://www.ciwmb.ca.gov/LGCentral/Paris/).

NOTE: Supporting documentation is attached in order of citation above.